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Serial No. 09/250,287
Lucent Ref. No. SOLONDZ 8

PATENT
29250-000217

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

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JAN 23 2003

Technology Center 2600

Appellants: Max A. SOLONDZ Conf: 1880
Serial No.: 09/250,287 Group: 2685
Filed: February 16, 1999 Examiner: M. Milord
For: METHOD OF MAKING DOWNLINK OPERATIONAL
MEASUREMENTS IN A WIRELESS COMMUNICATION SYSTEM

APPEAL BRIEF

Assistant Commissioner for Patents
Washington, D.C. 20231

January 21, 2003

Dear Sir:

Appellants submit herewith this brief on appeal in triplicate as required by the 37 C.F.R.

1-192.

1. REAL PARTY IN INTEREST:

The real party in interest is Lucent Technologies Incorporated, as evidenced by the Assignment recorded at Reel 9774, Frame 0568.

2. RELATED APPEALS AND INTERFERENCES:

No appeals or interferences are known.

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3. **STATUS OF THE CLAIMS:**

Claims 1-12, 14-22 and 24-25 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Sporre, U.S. Patent No. 5,966,657 in view of Wallstedt et al., U.S. Patent No. 5,854,981.

4. **STATUS OF ANY AMENDMENT FILED SUBSEQUENT TO THE FINAL REJECTION:**

A response was not filed after the Final Rejection of April 23, 2002.

5. **SUMMARY OF THE INVENTION:**

In operation of a wireless communication system according to an embodiment of the present invention is summarized by the flow chart illustrated in Figure 2. As is shown, in step S10 a base station of interest may generate a measurement request. The measurement request indicates the downlink operational measurement or measurements to be made, identifies the base stations which should receive the measurement request, and identifies the signal transmitted by the base station of interest to measure. (See page 4, lines 15-22 of the originally filed application.)

When a base station of interest generates the measurement request, the base station of interest sends the measurement request to the main control unit (MCU) 202. Then, the measurement request is routed by the MCU 202 to the base stations identified in the

measurement request. This is summarized in step S15 of Figure 2. (See page 5, lines 17-20 of the originally filed application.)

The identified base stations then send a measurement instruction to the mobile terminals in communication therewith. This is summarized in step S20 of Figure 2. Mobile terminals making the operational measurement may then send the results of those measurements to the respective identified base stations. This is summarized in step S30 in the Figure 2. (See page 5, lines 21-22 and page 6, lines 15-17 of the originally filed application.)

6. **ISSUES PRESENTED:**

Issue 1: Are claims 1-12, 14-22 and 24-25 rendered obvious by Sporre in view of Wallstedt et al.?

Issue 2: Is the combination of Sporre in view of Wallstedt et al. a proper obviousness rejection under 35 U.S.C. § 103?

7. **GROUPING OF CLAIMS:**

For the purposes of this Appeal, the following claims are to be grouped together as indicated:

The pending claims stand or fall together.

Appellants respectfully submit that the claims are patentable for the reasons set forth below.

8. **ARGUMENTS:**

Issue 1: Are claims 1-12, 14-22 and 24-25 rendered obvious by Sporre in view of Wallstedt et al.?

Each of independent claims 1 and 16 sets forth "...sending a measurement request from a first base station to at least a second base station, said measurement request requesting said second base station to instruct mobile terminals in communication with said second base station to make operation measurements of at least the one signal transmitted by said first base station." Neither of the patent documents relied upon by the Examiner teaches or suggests this limitation of the independent claims. Therefore, for at least this limitation, both the independent claims are allowable over the patent documents relied upon by the Examiner. A detailed discussion of the patent documents relied upon follows.

Turning now to the Sporre patent document, taught therein is a method and system for radio frequency measurement and automatic frequency planning in a cellular radio system. As is disclosed by Sporre, and is well known in current cellular systems, when a new connection is established through a mobile station by a base station, the base station orders that mobile station to make periodic signal quality measurements on the down-link BCCH channels of the base stations serving the cells which are neighbors to the one in which the mobile is located (Column 7, lines 60-66). This type of activity typically occurs in order to assist the current serving base station in making a proper decision as to which neighboring base station should accept a handoff when such is necessary. In other words, as the mobile station reaches a certain distance from the serving base station, the serving base station must make a decision as to which base station will

carry out further service for the mobile station. This decision is based upon the mobile station's measurements of surrounding base stations.

Sporre fails to suggest the novel idea of "sending a measurement request from a first base station to at least a second base station, said measurement request requesting said second base station to instruct mobile terminals in communication with said second base station to make operation measurements of at least one signal transmitted by said first base station."

As indicated hereinabove, in order to attempt to make up for this deficiency in Sporre, the Examiner has relied upon a patent document to Wallstedt et al. Appellant has carefully analyzed Wallstedt et al. in order to discern the teachings therein. However, even after exhaustive analysis of the Wallstedt et al. patent document, Appellant respectfully submits that the disclosure therein fails to make up for the deficiencies of the Sporre patent document.

Turning now to the Wallstedt et al. patent document, taught therein is a method for modifying an adaptive channel allocation (ACA) measurement process to include digital control channel (DCCH) information of specific neighboring cells. This ACA and DCCH information is communicated to a mobile station by way of an MSC via a base station. In turn, the mobile station measures the interference level (signal strength) on the downlink of each channel in the measurement list during an MAHO measurement process. Thereafter, the mobile station transmits the measurement results to the MSC via the base station controlling the cell. This completes the steps required in the measurement process.

Unlike the instant claimed invention, Wallstedt et al. fails to teach or suggest "sending a measurement request from a first base station to at least a second base station, said measurement request requesting said second base station to instruct mobile terminals in communication with

said second base station to make operation measurements of at least one signal transmitted by said first base station.” Instead, the patent Wallstedt et al. requires the use of an additional processing unit (e.g., an MSC). Therefore Sporre in view of Wallstedt et al. fails to teach or suggest the novel limitations of the rejected independent claims.

Issue 2: Is the combination of Sporre in view of Wallstedt et al. a proper obviousness rejection under 35 U.S.C. § 103?

Appellant respectfully submits that the Examiner has failed to present a proper *prima facie* case of obviousness. The Examiner is respectfully reminded, in determining the propriety of the patent office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification. *In re Lintner*, 173 USPQ 560, 562 (CCPA 1972). In the case of the current combination of Sporre in view of Wallstedt et al., Appellant respectfully submits that the teachings thereof are wholly insufficient to support a proper obviousness rejection; moreover, Appellant respectfully submits that there is no suggestion or motivation, found in either of the patent documents relied upon by the Examiner, or within the knowledge of one of ordinary skill in the art, that would motivate a skilled artisan to combine the patent documents relied upon by the Examiner.

To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, it is to fall victim of the insidious affect of a hindsight syndrome wherein that which the inventor taught is used

against its teacher. W.L. Gore & Assocs., Inc. v. Garlock, Inc., 220 USPQ 202, 212-13 (Fed. Cir. 1983, cert. denied, 469 U.S. 851 (1984)). When combining the relied upon documents, the Examiner states "it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this signal strength measurement techniques of Wallstedt to the communications system of Sporre in order to make operational measurements along with signal quality measurements of channels from the serving base station as well as signal quality measurements for channels from other base stations." This reason seems to have been derived from the Appellant's own disclosure. Certainly, neither of the patent documents relied upon by the Examiner suggests the motivation asserted by the Examiner; moreover, the Examiner has failed to provide compelling evidence as to why one of ordinary skill in the art would make the relied upon combination. Therefore, it can only be assumed that the Examiner has relied upon hindsight reconstruction in asserting that Wallstedt et al. may be combined with the teachings of Sporre.

In view of that which is discussed herein, Appellants respectfully submit that the independent claims are not rendered obvious to one of ordinary skill in the art by Sporre in view of Wallstedt et al. With regard to the rejected dependent claims, these claims are patentable for the reasons stated above with respect to the independent claims, as well as on their own merits.

CONCLUSION

For the reasons set forth above, it is clear that the present invention as recited in the Appellants claims are not rendered obvious to one skilled in the art as asserted by the Examiner. Accordingly, it is respectfully submitted that the claimed invention should be found patentable

over the cited art. Therefore, the board is respectfully requested that this Appeal be granted and that the Examiner be reversed.

All of the stated grounds of rejection have been properly traversed, accommodated, and/or rendered moot. Appellants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is condition for allowance.

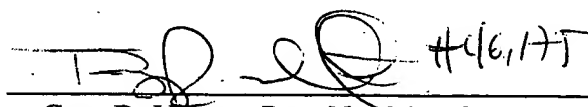
If the Examiner believes, for any reason, that personal communication will expedite the prosecution of this application, the Examiner is invited to telephone Timothy R. Wyckoff (Reg. No. 46,175) at (703) 668-8000 in the Washington D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C

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9. APPENDIX:

1. (Amended) A method of making operational measurements in a wireless communication system, comprising:

a) sending a measurement request from a first base station to at least a second base station, said measurement request requesting said second base station to instruct mobile terminals in communication with said second base station to make operation measurements of at least one signal transmitted by said first base station;

b) transmitting a measurement instruction from said second base station to said mobile terminals in communication with said second base station in response to said measurement request, said measurement instruction instructing said mobile terminals in communication with said second first base station to make operational measurements of said signal transmitted first base station; and

c) receiving results of said operational measurements at said second base station from said mobile terminals in communication with said second base station.

2. (Amended) The method of claim 1, further comprising:

d) sending said received results to a main controller.

3.(Amended) The method of claim 1, further comprising:

d) processing said received results; and

e) sending said processed received results to a main controller.

4. The method of claim 3, wherein said step d) averages said received results.
5. The method of claim 3, wherein
said step c) receives results of said operational measurements and location information indicating a location of said mobile terminal taking each operational measurement; and
said step d) creates a map of said received results based on said location information.
6. The method of claim 1, wherein said step c) receives results of said operational measurements and location information indicating a location of said mobile terminal taking each operational measurement.
7. The method of claim 1, wherein said signal transmitted from said first base station is transmitted at a constant power level.
8. The method of claim 7, wherein said transmitted from said first base station is a forward control channel signal.
9. The method of claim 7, wherein said wireless communication system is a code-division multiple access system and said signal transmitted from said first base station is a pilot signal.
10. The method of claim 7, wherein said signal is one of a reserved or dummy channel.

11. The method of claim 7, wherein said signal is an existing channel held at a constant power level.

12. The method of claim 1, further comprising:

d) making said operation measurements at said mobile terminals in communication with said second base station during off time-slots of said mobile terminals in communication with said second base station in response to said measurements instruction.

14. (Amended) The method of claim 1, wherein

said step a) sends a measurement request from said first base station to said second base station via a main controller, said measurement request instructing said main controller to send said measurement request to said second base station.

15. The method of claim 1, wherein said operational measurements includes at least one of signal strength, signal-to-noise ratio, frame error rate and bit error rate of said signal transmitted from said first base station as received at said mobile terminals in communication with said second base station.

16. (Amended) A method of making operational measurements in a wireless communication system, comprising:

- a) sending a measurement request from a first base station to at least a second base station, said measurement request requesting said second base station to make operation measurements of at least one signal transmitted by said first base station; and
- b) making said operational measurements at said second base station.

17. (Amended) The method of claim 16, further comprising:

- c) sending said received results to a main controller.

18. The method of claim 16, wherein said signal transmitted from said first base station is transmitted at a constant power level.

19. The method of claim 18, wherein said signal transmitted from said first base station is a forward control channel signal.

20. The method of claim 18, wherein said wireless communication system is a code-division multiple access system and said signal transmitted from said first base station is a pilot signal.

21. The method of claim 18, wherein said signal is one of a reserved or dummy channel.

22. The method of claim 18 wherein said signal is an existing channel held at a constant power level.

24. (Amended) The method of claim 16, wherein
said step a) sends said measurement request from said first base station to said second base station via a main controller, said measurement request instructing said main controller to send said measurement request to said second base station.

25. The method of claim 16, wherein said operational measurements includes at least one of signal strength, signal-to-noise ratio, frame error rate and bit error rate of said signal transmitted from said first base station as received at said second base station.